

## **Session 3.4.1      Tuesday – 10:30am – Salon A**

### **Custom Forms in ArcPad for Wetland Data Collection and Report Generation**

#### **Presenter**

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#### **Abstract:**

Balke American conducts various Environmental studies for state and federal funded transportation projects. One of the tasks is to identify and investigate wetlands, streams and other ecological features in the project study area.

As part of Environmental studies, Balke American conducts Wetland determination surveys based on the Ohio Rapid Assessment Method (ORAM). This is a general wetland assessment tool developed and used by Ohio EPA staff and applicants to quickly estimate the function and quality of wetlands through a survey of the wetland's size, buffers, surrounding land uses, water sources, habitat, special features, plant communities and their distribution and other habitat features to help determine the quality of the wetland. The information collected is collaborated with data from more intensive monitoring techniques, including results from surveys of the plant, amphibian and macroinvertebrate communities at reference wetlands.

This process requires extensive wetland related data collection in the field and create report for various technical documents. This presentation delves into technological advances in ArcPad's custom forms to collect data and generate report in a seamless manner. It also illustrates the ability to automate several data collection processes to prevent any error and perform the task in less time and minimum input from the user. During the investigation, scientists need a lot of secondary information handy like soil type, slope, vegetation, etc to evaluate and score the wetland. This technology makes it possible to query for such information geographically from already included GIS layers in ArcPad. This presentation also covers methods we use to generate reports based on the data collected back in office with minimum effort from the user.

#### **BIO:**

As a Planner at Balke American, Mr. Ghosh Choudhuri has been involved in several projects through research and technical analysis, transportation and environmental strategy development using quantitative research methods and GIS. He is responsible for environmental impact analysis maps and other documents, maps for public involvement meetings for effective information dissemination, quantitative and qualitative analysis of socioeconomic impact on land use, traffic and accident data analysis using GIS. He also provides GIS support to the company using ESRI Products. He has past experience in County and City level governments like Lee County (Florida) Division of Planning, and Planning Division, City of Buffalo, New York.